

ABSTRACT OF THE DISCLOSURE

METHOD OF MANUFACTURING GROUP III NITRIDE SUBSTRATE

5 The present invention provides a manufacturing method that makes
it possible to manufacture a substrate that is formed of high-quality Group
III nitride crystals alone and has less warping. A Group III nitride layer (a
seed layer and a selective growth layer) including gaps is formed on a
substrate (a sapphire substrate). In an atmosphere containing nitrogen,
10 the surface of the Group III nitride layer is brought into contact with a melt
containing alkali metal and at least one Group III element selected from
gallium, aluminum, and indium, and thereby the at least one Group III
element and the nitrogen are made to react with each other to grow Group
III nitride crystals (GaN crystals) on the Group III nitride layer.
15 Thereafter, a part including the substrate and a part including the Group III
nitride crystals are separated from each other in the vicinities of the gaps.